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NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 JAN 08 CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 3 JAN 16 CA/CAPplus Company Name Thesaurus enhanced and reloaded
NEWS 4 JAN 16 IPC version 2007.01 thesaurus available on STN
NEWS 5 JAN 16 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS 6 JAN 22 CA/CAPplus updated with revised CAS roles
NEWS 7 JAN 22 CA/CAPplus enhanced with patent applications from India
NEWS 8 JAN 29 PHAR reloaded with new search and display fields
NEWS 9 JAN 29 CAS Registry Number crossover limit increased to 300,000 in
multiple databases
NEWS 10 FEB 15 PATDPASPC enhanced with Drug Approval numbers
NEWS 11 FEB 15 RUSSIAPAT enhanced with pre-1994 records
NEWS 12 FEB 23 KOREAPAT enhanced with IPC 8 features and functionality
NEWS 13 FEB 26 MEDLINE reloaded with enhancements
NEWS 14 FEB 26 EMBASE enhanced with Clinical Trial Number field
NEWS 15 FEB 26 TOXCENTER enhanced with reloaded MEDLINE
NEWS 16 FEB 26 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 17 FEB 26 CAS Registry Number crossover limit increased from 10,000
to 300,000 in multiple databases
NEWS 18 MAR 15 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19 MAR 16 CASREACT coverage extended
NEWS 20 MAR 20 MARPAT now updated daily
NEWS 21 MAR 22 LWPI reloaded
NEWS 22 MAR 30 RDISCLOSURE reloaded with enhancements
NEWS 23 APR 02 JICST-EPLUS removed from database clusters and STN
NEWS 24 APR 30 GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25 APR 30 CHEMCATS enhanced with 1.2 million new records
NEWS 26 APR 30 CA/CAPplus enhanced with 1870-1889 U.S. patent records
NEWS 27 APR 30 INPADOC replaced by INPADOCDB on STN
NEWS 28 MAY 01 New CAS web site launched
NEWS 29 MAY 08 CA/CAPplus Indian patent publication number format defined
NEWS 30 MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display
fields
NEWS 31 MAY 21 BIOSIS reloaded and enhanced with archival data
NEWS 32 MAY 21 TOXCENTER enhanced with BIOSIS reload
NEWS 33 MAY 21 CA/CAPplus enhanced with additional kind codes for German
patents
NEWS 34 MAY 22 CA/CAPplus enhanced with IPC reclassification in Japanese
patents

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:51:36 ON 15 JUN 2007

=> file medline, biosis

COST IN U.S. DOLLARS

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TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'MEDLINE' ENTERED AT 15:51:56 ON 15 JUN 2007

FILE 'BIOSIS' ENTERED AT 15:51:56 ON 15 JUN 2007

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=> (triacylglycerol production)

(TRIACYLGLYCEROL IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> s (triacylglycerol production)

L1 0 (TRIACYLGLYCEROL PRODUCTION)

=> s (triacylglycerol) and production

L2 1133 (TRIACYLGLYCEROL) AND PRODUCTION

=> s l2 and increase (oil content)

MISSING OPERATOR 'INCREASE (OIL'

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s l2 and (increase oil content)

L3 0 L2 AND (INCREASE OIL CONTENT)

=> s l2 and (enzyme)

L4 175 L2 AND (ENZYME)

=> s l4 and (catalyze an acyl-CoA independent reaction)

L5 0 L4 AND (CATALYZE AN ACYL-COA INDEPENDENT REACTION)

=> s l4 and (S. cerevisiae)

L6 4 L4 AND (S. CEREVISIAE)

=> d l6 ti abs ibib tot

L6 ANSWER 1 OF 4 MEDLINE on STN

TI Synthesis of novel lipids in *Saccharomyces cerevisiae* by heterologous expression of an unspecific bacterial acyltransferase.

AB The bifunctional wax ester synthase/acyl-coenzyme A:diacylglycerol acyltransferase (WS/DGAT) is the key enzyme in storage lipid accumulation in the gram-negative bacterium *Acinetobacter calcoaceticus* ADP1, mediating wax ester, and to a lesser extent, triacylglycerol (TAG) biosynthesis. *Saccharomyces cerevisiae* accumulates TAGs and sterol esters as storage lipids. Four genes encoding a DGAT (Dgalp), a phospholipid:diacylglycerol acyltransferase (Lrolp) and two acyl-coenzyme

A:sterol acyltransferases (ASATs) (Are1p and Are2p) are involved in the final esterification steps in TAG and steryl ester biosynthesis in this yeast. In the quadruple mutant strain *S. cerevisiae* H1246, the disruption of DGA1, LRO1, ARE1, and ARE2 leads to an inability to synthesize storage lipids. Heterologous expression of WS/DGAT from *A. calcoaceticus* ADP1 in *S. cerevisiae* H1246 restored TAG but not steryl ester biosynthesis, although high levels of ASAT activity could be demonstrated for WS/DGAT expressed in *Escherichia coli* XL1-Blue in radiometric in vitro assays with cholesterol and ergosterol as substrates. In addition to TAG synthesis, heterologous expression of WS/DGAT in *S. cerevisiae* H1246 resulted also in the accumulation of fatty acid ethyl esters as well as fatty acid isoamyl esters. In vitro studies confirmed that WS/DGAT is capable of utilizing a broad range of alcohols as substrates comprising long-chain fatty alcohols like hexadecanol as well as short-chain alcohols like ethanol or isoamyl alcohol. This study demonstrated the highly unspecific acyltransferase activity of WS/DGAT from *A. calcoaceticus* ADP1, indicating the broad biocatalytic potential of this enzyme for biotechnological production of a large variety of lipids in vivo in prokaryotic as well as eukaryotic expression hosts.

ACCESSION NUMBER: 2004600773 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15574908
TITLE: Synthesis of novel lipids in *Saccharomyces cerevisiae* by heterologous expression of an unspecific bacterial acyltransferase.
AUTHOR: Kalscheuer Rainer; Luftmann Heinrich; Steinbuchel Alexander
CORPORATE SOURCE: Institut für Molekulare Mikrobiologie und Biotechnologie, Westfälische Wilhelms-Universität, Münster, Germany.
SOURCE: Applied and environmental microbiology, (2004 Dec) Vol. 70, No. 12, pp. 7119-25.
Journal code: 7605801. ISSN: 0099-2240.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200502
ENTRY DATE: Entered STN: 3 Dec 2004
Last Updated on STN: 16 Feb 2005
Entered Medline: 15 Feb 2005

L6 ANSWER 2 OF 4 MEDLINE on STN
TI Effect of hypertension on lipid metabolism and beta-oxidation in rat aorta and brain microvessels.
AB The effects of hypertension on various enzyme activities involved in lipid metabolism and beta-oxidation in rat brain microvessels and aorta were studied. The purity of the brain microvessel preparation was confirmed immunologically and microscopically. Activities involved in lipid synthesis, such as triacylglycerol synthesizing activity, acyl-CoA synthesizing activity, acyl-CoA: cholesterol acyltransferase and cytidine diphosphate choline:1,2-diacylglycerol cholinephosphotransferase, were significantly higher in brain microvessels than in aorta in both normotensive and hypertensive rats; lipid hydrolyzing activities, such as lipases and cholesterol esterases, were similar in the two preparations. beta-oxidation in brain microvessels was more active than in aorta in both groups. Hypertension did not alter these enzyme activities in either aorta or brain microvessels, or change beta-oxidation in the aorta. However beta-oxidation in brain microvessels was significantly lower in hypertensive rats than in normotensive rats. These results suggest that brain microvessels are metabolically more active than aorta, and that their beta-oxidation activity is more susceptible to effects of hypertension. Reduced beta-oxidation in brain microvessels might lead to angionecrosis by derangement of energy production, which in turn may cause cerebral bleeding.

ACCESSION NUMBER: 83203441 MEDLINE

DOCUMENT NUMBER: PubMed ID: 6303275
TITLE: Effect of hypertension on lipid metabolism and
beta-oxidation in rat aorta and brain microvessels.
AUTHOR: Sasaki N; Morisaki N; Shinomiya M; Matsuoka N; Saito Y;
Wakashin M; Ueda S; Kumagai A
SOURCE: Artery, (1982) Vol. 11, No. 2, pp. 108-18.
Journal code: 7508494. ISSN: 0098-6127.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198306
ENTRY DATE: Entered STN: 18 Mar 1990
Last Updated on STN: 6 Feb 1998
Entered Medline: 23 Jun 1983

L6 ANSWER 3 OF 4 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
TI Synthesis of novel lipids in *Saccharomyces cerevisiae* by heterologous
expression of an unspecific bacterial acyltransferase.
AB The bifunctional wax ester synthase/acyl-coenzyme A:diacylglycerol
acyltransferase (WS/DGAT) is the key enzyme in storage lipid
accumulation in the gram-negative bacterium *Acinetobacter calcoaceticus*
ADP1, mediating wax ester, and to a lesser extent, triacylglycerol
(TAG) biosynthesis. *Saccharomyces cerevisiae* accumulates TAGs and steryl
esters as storage lipids. Four genes encoding a DGAT (Dgalp), a
phospholipid:diacylglycerol acyltransferase (Lro1p) and two acyl-coenzyme
A:sterol acyltransferases (ASATs) (Are1p and Are2p) are involved in the
final esterification steps in TAG and steryl ester biosynthesis in this
yeast. In the quadruple mutant strain *S. cerevisiae*
H1246, the disruption of DGA1, LRO1, ARE1, and ARE2 leads to an inability
to synthesize storage lipids. Heterologous expression of WS/DGAT from *A.*
calcoaceticus ADP1 in *S. cerevisiae* H1246 restored TAG
but not steryl ester biosynthesis, although high levels of ASAT activity
could be demonstrated for WS/DGAT expressed in *Escherichia coli* XL1-Blue
in radiometric in vitro assays with cholesterol and ergosterol as
substrates. In addition to TAG synthesis, heterologous expression of
WS/DGAT in *S. cerevisiae* H1246 resulted also in the
accumulation of fatty acid ethyl esters as well as fatty acid isoamyl
esters. In vitro studies confirmed that WS/DGAT is capable of utilizing a
broad range of alcohols as substrates comprising long-chain fatty alcohols
like hexadecanol as well as short-chain alcohols like ethanol or isoamyl
alcohol. This study demonstrated the highly unspecific acyltransferase
activity of WS/DGAT from *A. calcoaceticus* ADP1, indicating the broad
biocatalytic potential of this enzyme for biotechnological
production of a large variety of lipids in vivo in prokaryotic as
well as eukaryotic expression hosts.

ACCESSION NUMBER: 2005:119076 BIOSIS
DOCUMENT NUMBER: PREV200500117462
TITLE: Synthesis of novel lipids in *Saccharomyces cerevisiae* by
heterologous expression of an unspecific bacterial
acyltransferase.
AUTHOR(S): Kalscheuer, Rainer; Luftmann, Heinrich; Steinbuechel,
Alexander [Reprint Author]
CORPORATE SOURCE: Inst Mol Mikrobiol and Biotechnol, Univ Munster, Corrensstr
3, D-48149, Munster, Germany
steinbu@uni-muenster.de
SOURCE: Applied and Environmental Microbiology, (December 2004)
Vol. 70, No. 12, pp. 7119-7125. print.
ISSN: 0099-2240 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Mar 2005
Last Updated on STN: 23 Mar 2005

L6 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
TI Expression of *Rhizopus oryzae* lipase gene in *Saccharomyces cerevisiae*.
AB The extracellular production of active *Rhizopus oryzae* lipase
(ROL) was carried out by the expression of the ProROL gene encoding a
pro-form of ROL (ProROL) using prepro-alpha-factor in *Saccharomyces*
cerevisiae. Two forms of recombinant ROL (rROL), rProROL by the
expression of the ProROL gene and r28ROL which was a processed form of
rProROL in the prosequence, were produced. Such a processing of rROL was
catalyzed by the Kex2 membrane-bound endoprotease (Kex2p) in the late
Golgi compartment. The ProROL and r28ROL could be produced independently
as a single protein by the Kex2-engineered *S. cerevisiae*.
Comparison of the properties of purified rROL showed that the
prosequence modified some properties of ROL, and implied that the
prosequence might play an physiologically important role in vivo. When
only mature ROL (mROL) without the prosequence fused to the
pre-alpha-factor leader sequence was expressed in *S.*
cerevisiae, the enzyme activity was not observed in both
the medium and cells. However, when the mROL was co-expressed in trans
with the prosequence fused to the pre-alpha-factor leader sequence, the
activity was recovered. The results showed that the prosequence may
facilitate the folding of mROL, and the covalent linkage of the
prosequence to the mROL was not necessary for the function. As the result
of the deletion analysis at the N-terminus in the prosequence, the
prosequence might work as an intramolecular chaperone. By the cell
surface engineering using the gene encoding the C-terminal half of yeast
alpha-agglutinin and the insertion of linker peptides, a novel strain
displaying lipase on the cell surface was also constructed. Although
S. cerevisiae itself is unable to utilize triolein, the
transformant strain could grow on triolein as the sole carbon source. The
cell surface-engineered yeast displaying ROL might be used as a potent
biocatalyst.

ACCESSION NUMBER: 2002:401114 BIOSIS
DOCUMENT NUMBER: PREV200200401114
TITLE: Expression of *Rhizopus oryzae* lipase gene in *Saccharomyces*
cerevisiae.
AUTHOR(S): Ueda, Mitsuyoshi [Reprint author]; Takahashi, Shouji;
Washida, Motohisa; Shiraga, Seizaburo; Tanaka, Atsuo
CORPORATE SOURCE: Laboratory of Applied Biological Chemistry, Department of
Synthetic Chemistry and Biological Chemistry, Graduate
School of Engineering, Kyoto University, Sakyo-ku, Kyoto,
606-8501, Japan
miueda@sbchem.kyoto-u.ac.jp
SOURCE: Journal of Molecular Catalysis B Enzymatic, (7 June, 2002)
Vol. 17, No. 3-5, pp. 113-124. print.
ISSN: 1381-1177.
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Jul 2002
Last Updated on STN: 29 Aug 2002

=> d his

(FILE 'HOME' ENTERED AT 15:51:36 ON 15 JUN 2007)

FILE 'MEDLINE, BIOSIS' ENTERED AT 15:51:56 ON 15 JUN 2007

L1 0 S (TRIACYLYGLYCEROL PRODUCTION)
L2 1133 S (TRIACYLGLYCEROL) AND PRODUCTION
L3 0 S L2 AND (INCREASE OIL CONTENT)
L4 175 S L2 AND (ENZYME)
L5 0 S L4 AND (CATALYZE AN ACYL-COA INDEPENDENT REACTION)
L6 4 S L4 AND (S. CEREVISIAE)

=> s 12 and (DNA)
L7 52 L2 AND (DNA)

=> s 17 and 16
L8 0 L7 AND L6

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US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

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<u>L3</u>	L2 and l1	5	<u>L3</u>
<u>L2</u>	(triacylglycerol production)	841118	<u>L2</u>
<u>L1</u>	dahlqvist.in.	23	<u>L1</u>

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Search Results - Record(s) 1 through 5 of 5 returned.

☐ 1. Document ID: US 6791008 B1

L3: Entry 1 of 5

File: USPT

Sep 14, 2004

US-PAT-NO: 6791008

DOCUMENT-IDENTIFIER: US 6791008 B1

TITLE: Use of a class of enzymes and their encoding genes to increase the oil content in transgenic organisms

DATE-ISSUED: September 14, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Banas; Antoni	Siedlce			PL
Sandager; Line	Copenhagen			DK
St.ang.hl; Ulf	Uppsala			SE
Dahlqvist; Anders	Furulund			SE
Lenman; Marit	Lund			SE
Ronne; Hans	Uppsala			SE
Stymne; Sten	Svalov			SE

US-CL-CURRENT: 800/281; 435/224, 435/471, 435/483, 536/23.1, 536/23.2, 536/23.7, 800/278, 800/298, 800/306

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 2. Document ID: US 6524900 B2

L3: Entry 2 of 5

File: USPT

Feb 25, 2003

US-PAT-NO: 6524900

DOCUMENT-IDENTIFIER: US 6524900 B2

TITLE: Method concerning a junction barrier Schottky diode, such a diode and use thereof

DATE-ISSUED: February 25, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dahlqvist; Fanny	Johanneshov			SE

Lendenmann; Heinz Stocksund SE
Hermansson; Willy Vaster.ang.s SE

US-CL-CURRENT: 438/167; 257/E21.359, 257/E27.051, 257/E29.104, 257/E29.338,
438/237, 438/328, 438/431

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 3. Document ID: US 6333448 B1

L3: Entry 3 of 5

File: USPT

Dec 25, 2001

US-PAT-NO: 6333448

DOCUMENT-IDENTIFIER: US 6333448 B1

TITLE: Plant enzyme and use thereof

DATE-ISSUED: December 25, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bafor; Maureen	Benin City			NG
Banas; Antoni	08-110 Siedlce			PL
<u>Dahlqvist</u> ; Anders	S-244 66 Furuland			SE
Gummeson; Per-Olov	S-227 38 Lund			SE
Lee; Michael	S-231 97 Klagstorp			SE
Sjodal; Staffan	S-756 50 Uppsala			SE
Stymne; Sten	S-268 90 Svalov			SE
Lenman; Marit	S-22359 Lund			SE

US-CL-CURRENT: 800/295; 435/254.1, 435/255.1, 435/419, 435/69.1, 536/23.6, 800/281

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 4. Document ID: US 6306357 B1

L3: Entry 4 of 5

File: USPT

Oct 23, 2001

US-PAT-NO: 6306357

DOCUMENT-IDENTIFIER: US 6306357 B1

**** See image for Certificate of Correction ****

TITLE: Process and apparatus for absorbing hydrogen sulphide

DATE-ISSUED: October 23, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Simonson; Erik	Vaxjo			SE

Wallin; Mats	Lund	SE
Bengtsson; Sune	Vaxjo	SE
Dahlqvist; Erik	Vaster.ang.s	SE

US-CL-CURRENT: [423/232](#); [162/51](#), [422/169](#), [422/170](#), [422/171](#), [422/181](#), [423/220](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 5. Document ID: US PP08319 P

L3: Entry 5 of 5

File: USPT

Jul 27, 1993

US-PAT-NO: PP08319

DOCUMENT-IDENTIFIER: US PP08319 P

TITLE: Poinsettia plant `Lilo White`

DATE-ISSUED: July 27, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dahlqvist; Kjell-Ingvar	Hollviken			SE

US-CL-CURRENT: [PLT/304](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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